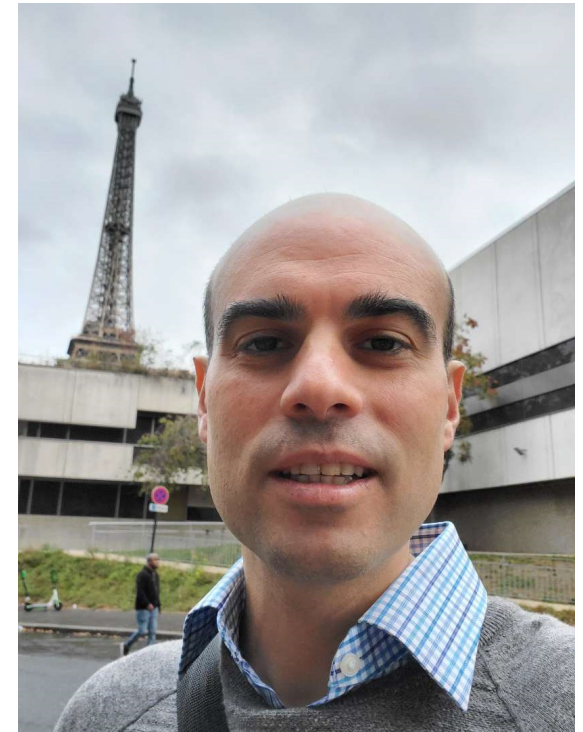


Business Process Management (BPM) with MediaWiki

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About me

- Developer, consultant, author, entrepreneur, evangelist, podcaster
- Based in New Jersey, United States



SMW and Cargo support lots of visualizations and use cases.

However, at least one use case is not supported well: business process management (BPM)

Business Process Management

The use of "various methods to discover, model, analyze, measure, improve, optimize, and automate business processes". (Wikipedia)

Why support BPM?

- It's widely used
- Potentially a lot of \$\$ involved
(sorry, €€)

Some BPM visualizations

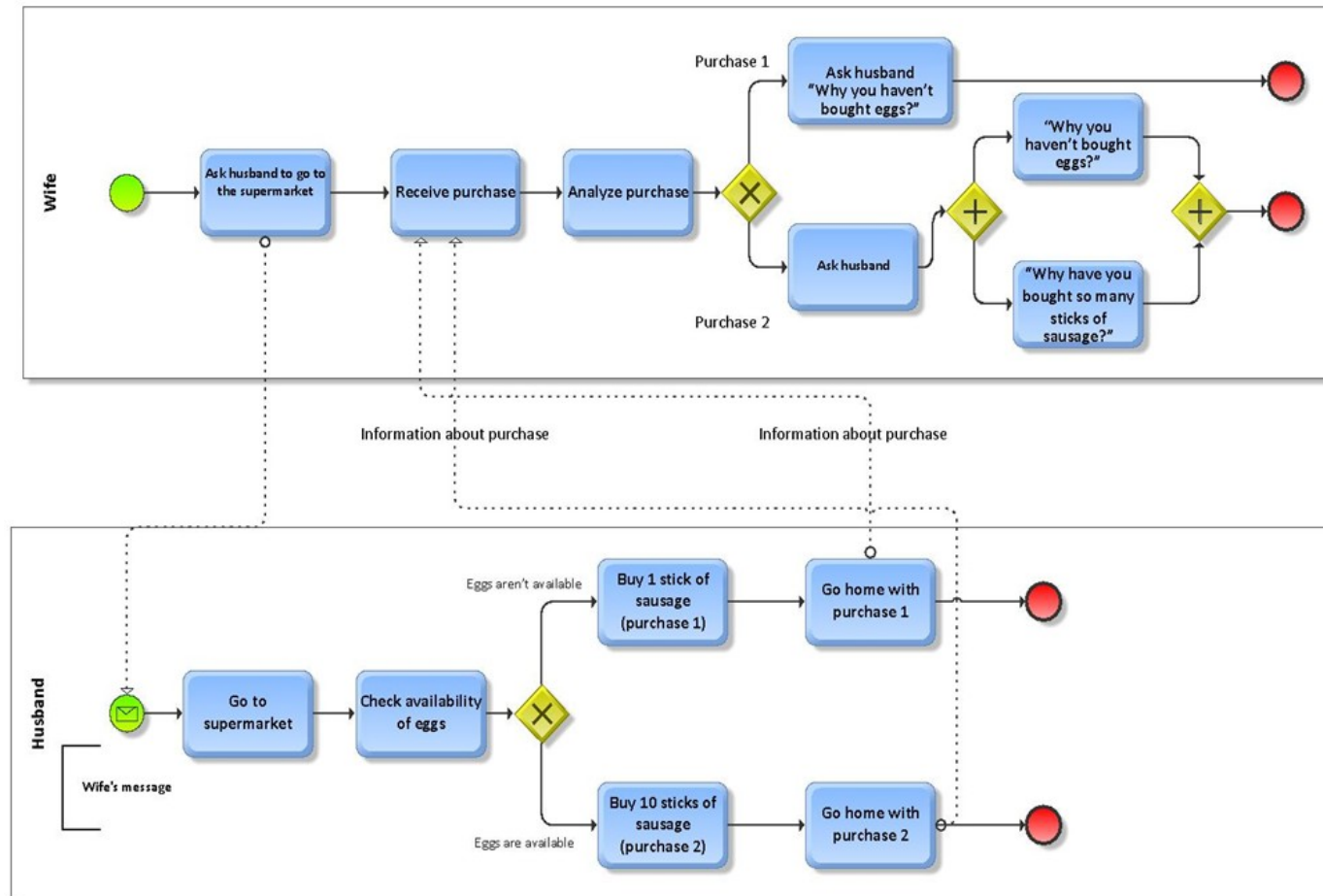
For repeated processes:

- **Flowchart** – defines workflow
- **RACI matrix** – defines responsibilities

For individual projects:

- **Gantt charts** – shows timeline and dependencies
- **Kanban boards** – shows tasks by status

Flowchart



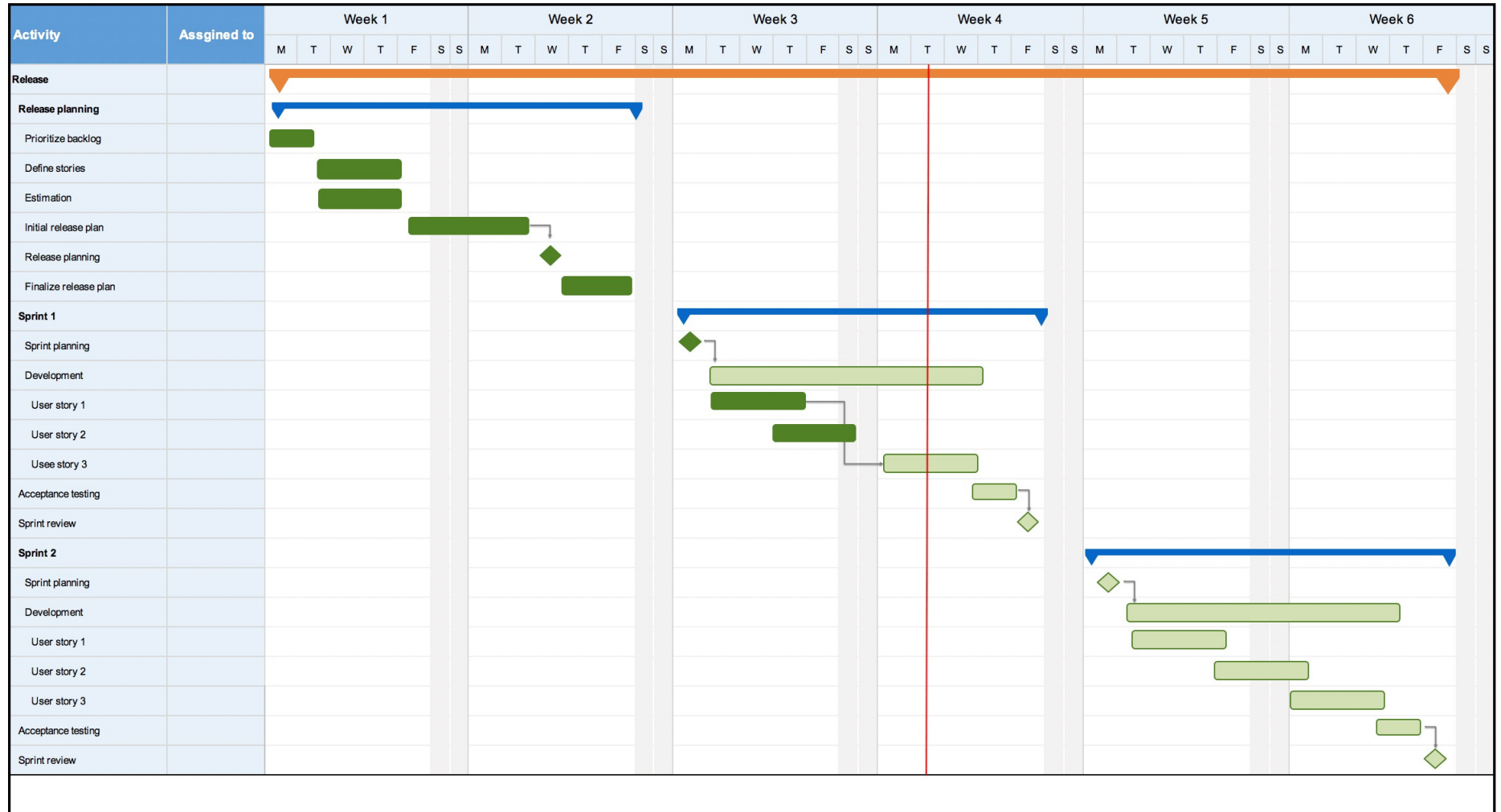
RACI matrix

Responsibility Assignment Matrix - RACI Chart

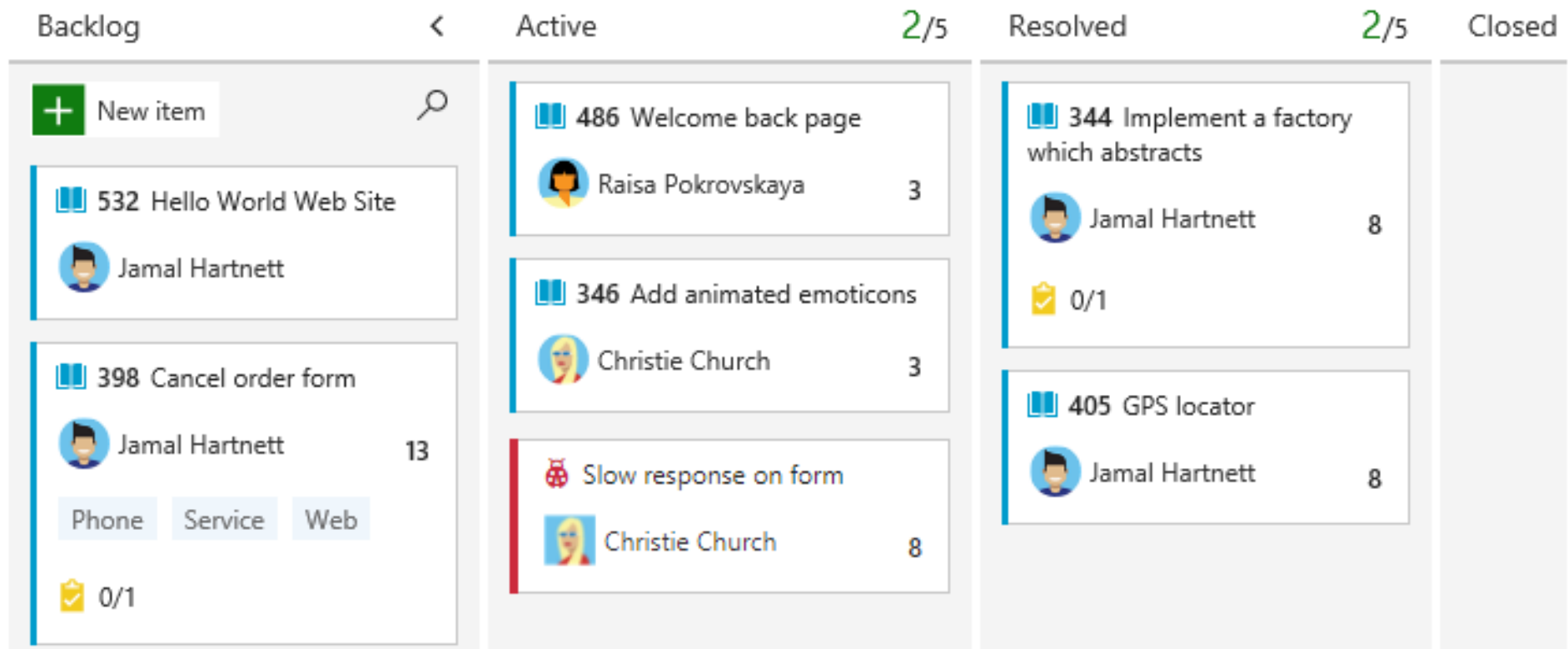
	Jeff	Michael	Reto	YOU	Alex	Anna	Bill	Cindy	Felix	Fred	Hans	John	Livio	Luc	Marco	Paul	Peter	Sue	Ted	Tim
Planning / Schedule	R	A	I	C					C											Q
Risk Management		I	I	Q						A								R		
Quality Management			R	C						R										A
Procurement				R		Q				R								R		A
1. Specifications Listing								A		R								R		R
2. Site Requirements		C	A	R	Q						R									
3. Call for Tenders				Q	A	R	C				R							R		
4. Budget Approval				A	Q					R							R			R
5. Contract Negotiations			A		Q	R	R											R		

* R – Responsible (works on), A – Accountable, C – Consulted, I – Informed, Q – Quality Reviewer

Gantt chart



Kanban board



Some standard BPM tools

- **bpmn.io** – flowcharts
- **Mermaid** – simple flowcharts, Gantt charts
- **DHTMLX** – flowcharts, Gantt charts, etc.
- **Draw.io, GraphViz** – generic diagramming tools

(I don't know of any standard tools for RACI matrixes or Kanban boards...)

How best to support BPM in MediaWiki?

- Should the data be stored across a lot of wiki pages, or in one big page/file?
- If it's stored as one page/file, should it also be queryable in some way?

One wiki page vs. many

The best solution for a specific visualization may depend on:

- How dependent different elements are on one another
- Whether there's a standard file syntax for this visualization

My view on each visualization

- **Flowchart** – one page (in BPMN XML)
- **RACI matrix** – many pages
- **Gantt charts** – one page
- **Kanban boards** – many pages

Existing BPM solutions for MediaWiki

- Cognitive Process Designer
- Mermaid extension
- “gantt” result format in Semantic Result Formats

Cognitive Process Designer

- No longer works (last updated in 2016)
- Stores data across lots of pages
- I think one file is preferable here, due to interconnectedness of flowcharts

Mermaid extension

- Provides a simple wrapper around the Mermaid JS library
- Stores all data in one place, but not queryable

“gantt” result format

- Uses Mermaid to display a Gantt chart, based on SMW data.

What I'm working on now

- An extension, tentatively called "Diagrams"
- In theory, it's not a BPM extension, but in practice, it might be.

The "Diagrams" approach

- Store diagram definitions directly in wiki pages.
- Edit and display using graphical tools
- Separately, provide hooks to let Cargo (or SMW) store the relevant information from these diagrams.

Currently, two
visualizations/namespaces are
supported by Diagrams: **BPMN** (via
bpmn.io) and **Gantt charts** (via
dxhtmlGantt)

Let's see the demo!

Other syntaxes for “Diagrams”?

- Draw.io? – I tried this, but couldn't get it working in Diagrams
- Mermaid? – lacks a graphical editor
- GraphViz? – no good JS-based graphical editor

What about Kanban & RACI?

- These might be best implemented via regular wiki pages, to be queried or graphically edited together

Kanban & RACI

- Kanban boards: best solution might be a Special:MultiPageEdit option in Page Forms (edited as a whole)
- RACI matrixes: best solution might be Cargo/SMW result formats (edited separately)

Thoughts?